DEPARTMENT OF THE NAVY
CHIEF OF NAVAL AIR TRAINING
CNATRA
250 LEXINGTON BLVD SUITE 102
CORPUS CHRISTI TX 78419-5041

CNATRAINST 1542.123A
N3111
15 August 1997

CNATRA INSTRUCTION 1542.123A

Subj: ADVANCED NAVAL FLIGHT OFFICER/AIR FORCE NAVIGATOR INSTRUCTOR UNDER TRAINING CURRICULUM

1. Purpose. To issue the curriculum for flight instructors to qualify to instruct Student Naval Flight Officers/Navigators in the Strike Fighter and Strike phases of Advanced Naval Flight Officer (NFO)/Air Force Navigator (AF NAV) training.

2. Cancellation

a. CNATRAINST 1542.123.

b. CNATRA 1542/1422 - 1425, CNATRA 1542/1432 - 1434, CNATRA 1542/1443 - 1444, CNATRA 1542/1469, and CNATRA 1542/1471.

c. PAT publication P-838.

3. Action. This instruction is effective for implementation upon receipt. No changes will be made without written authorization from the Chief of Naval Air Training (CNATRA).

4. Forms. The CNATRA forms required by this directive may be procured by submitting a request to CNATRA (N1221).

W. H. ROBERSON
Chief of Staff

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SUMMARY OF CHANGES

CHANGE NUMBER	DATE ENTERED	CHANGE DESCRIPTION	INITIALS

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COURSE DATA

1. Course Title. Advanced Naval Flight Officer/Air Force Navigator Instructor Under Training Curriculum.

2. Course Identification Number. Q-2D-0059.

3. Training Site/Course Data Processing (CDP) Code. Naval Air Station (NAS), Pensacola, FL/Training Squadron (TRARON) EIGHT SIX (321E).

4. Course Status. Revision, implement upon receipt.

5. Course Mission. The Advanced Naval Flight Officer/Navigator Instructor Under Training (IUT) program is designed to provide Naval Flight Officers/Navigators the techniques and procedures required to administer the various approved CNATRA Advanced Naval Flight Officer/Navigator Training Curricula. Skill and performance levels required for completion are outlined in the Enabling Objectives (EOs). Successful completion of applicable curricula qualifies the graduate as an advanced phase Naval Flight Officer/Navigator flight instructor.

6. Prerequisite Training. Any approved United States Navy, Marine Corps, or Air Force tactical jet Naval Flight Officer/Navigator curriculum.

7. Personnel and Ratings Eligible. Aviation designated officers assigned by the Chief of Naval Personnel, the Commandant of the Marine Corps, and the Commander of United States Air Force Military Personnel.

8. Physical Requirements. As specified in Chapter 15 of the Manual of the Medical Department.

9. Security Clearance Required. Confidential.

10. NOBC/NEC Earned. None.

11. Obligated Service. Not applicable.

12. Follow-on Training. None.

13. Course Length [Time to Train (Tt)]

a. Strike - 55.98 training days; 11.20 training weeks; 79 calendar days.

b. Strike/Fighter - 55.88 training days; 11.18 weeks; 78 calendar days.

14. Class Capacity. Variable; no maximum or minimum.

15. Instructor Requirements. As determined by Chief of Naval Operations (CNO) planning factors.

16. Course Curriculum Manager. Commander, Training Air Wing (COMTRAWING) SIX.

17. Quota Management Authority. Chief of Naval Air Training.

18. Quota Control. Chief of Naval Operations.

19. Primary Instructional Methods. Lecture; synthetic and airborne flight instruction.

20. Preceding Curriculum Data. CNATRAINST 1542.123.

21. Instructor-Under-Training (IUT) Performance Measurement

a. Flight Support: Criterion reference testing is used for all examinations.

b. Flight and Trainer: All events are subjectively evaluated using normative reference measurement procedures.

c. Final Qualifications: Final flight instructor qualification is based on a subjective evaluation by the standardization instructor for the appropriate curriculum.

22. Application of Standards to the Measurement of IUT Performance. The standards outlined in the Specific Enabling Objectives are used to evaluate the IUT's performance of individual items. The standards serve as a guide and describe the envelope or parameters in which an IUT must perform to satisfactorily meet the training objectives. Excursions beyond the "plus" or "minus" or other standards are expected and acceptable as long as timely corrections are made and safety of flight is not compromised. Procedural knowledge and application must be in accordance with applicable directives or manuals. Final judgment regarding satisfactory performance of any item rests with the standardization instructor who is capable of assessing the factors affecting the condition under which performance is measured.

CURRICULUM GUIDELINES

1. Sequencing. The IUT curriculum shall be completed in sequence by module; Strike instructors complete Modules 0, 1, and 3; Strike/Fighter instructors complete Modules 0 and 2. Completion of an entire module is required prior to training in subsequent modules. Certain instructors may be designated as partially qualified in Strike or Strike/Fighter in addition to their primary curriculum (e.g., a Strike/Fighter instructor may be qualified to instruct Airways Navigation and Low Levels in the Strike curriculum). Events within each module should be scheduled in sequence to the greatest extent possible. Module 0 is the only module that may be run concurrently with other modules. The Progress Review Board (PRB) requirement of Module 0 may be waived until the completion of Module 1 or 2. Deviation from the prescribed course of instruction requires approval from the curriculum model manager, COMTRAWING SIX.

2. Briefing Time. Adequate briefing time shall be provided. Standardization instructors shall brief the requirements of each flight and shall thoroughly debrief/critique the IUT's perform-ance. Although IUTs may be briefed early on fundamental techniques, all members of the flight or crew must be present for the Naval Air Training Operating Procedures Standardization (NATOPS) brief prior to take-off. The minimum items that must be briefed are as follows:

a. Weather.

b. Sequence of events.

c. Communication plan.

d. Exception, omissions, additions, and substitutions to maneuvers and procedures described in the flight training instruction (FTI) and the briefing guide for the specific curriculum flight.

e. No radio (NORDO) procedures.

f. Applicable emergency procedures.

3. Schedule Limitations

a. The IUT’s working day from first scheduled event to last on deck time (debrief included) shall not exceed 12 hours.

b. A minimum of 12 hours shall elapse between the IUT's last completed event/lecture on one day and the first scheduled event/ lecture the following day.

c. All IUT graded events will be conducted by a qualified standardization instructor.

d. A maximum of two events (flight/simulator) or three cross-country legs may be scheduled in one day.

e. In Modules 1 and 2, IUTs must complete the appropriate simulators prior to the flight or flights they support.

4. Flight Standardization. All flights and simulator events shall be conducted in accordance with CNATRAINST 3710.13D, NATOPS, the applicable FTI, and standard operating procedures (SOPs).

5. Solo Restrictions. There are no solo flights in this curriculum.

6. Administration

a. Instructor Training Forms (ITFs)

(1) A CNATRA ITF shall be completed in accordance with CNATRAINST 1500.4E, etcetera.

(2) ITFs shall be graded the same day the flight or simulator is flown.

(3) All items called for in the curriculum must be completed, and no additional items may be added.

b. Warm-up Criteria. Warm-up flights may be given as necessary to regain flight proficiency after prolonged delays in training. An optional warm-up event may be given to regain flight proficiency lost due to a layoff if overall below average performance results from the delay. Below average or unsatisfactory performance in procedural categories cannot be attributed to a flight layoff period. If an IUT's performance is up to standards, the flight shall be graded appropriately as a regular curriculum event. The following specific guidelines govern warm-up flights.

(1) An IUT is eligible for an optional warm-up event if that individual has not flown in seven calendar days.

(2) Warm-up ITFs do not have to be marked with an unsatisfactory grade to justify a warmup if the overall performance is not up to standards for that flight.

(3) Warm-ups are not applicable between modules of any portion of this curriculum.

c. Training Documentation. All events shall be documented in the IUT's Training Jacket, OPNAV 3760/32, on an appropriate CNATRA ITF. All items graded unsatisfactory or below/above average shall be commented upon in the remarks section.

d. Instructor Designation. Upon successful completion of the IUT curriculum, COMTRAWING SIX will provide a letter of designation to be entered in the Instructor's Flight Personnel Training Jacket, OPNAV 3760/32. In all pipelines, Flight Physiology (PHY) and refresher swim (R-3 or R-1) are required only if the IUT's qualifications will expire within a year of designation as an instructor. Instrument Ground School (IGS) is only required if the IUT's qualifications will expire within 3 months of designation as an instructor.

7. Waiving Events. The events listed are the minimum to be completed by all IUTs to achieve respective stage qualifications. Unless specifically authorized, no provisions of this curriculum shall be waived without authorization from COMTRAWING SIX. A copy of all waivers shall be sent to CNATRA (N31).

8. Incomplete Flights. Incomplete events may be completed during the following event if time and fuel are available. On a flight completing a previously incomplete event, only omitted items should be performed and graded. Items such as headwork, situational awareness and procedures that are evaluated through out the entirety of the flight should be graded only on the flight comprising the majority of the graded events, unless circumstances dictate otherwise.

9. Weather/Safety Pilots. No requirement for weather or safety pilots exists in this curriculum.

10. Emergency Procedures. Emergency procedures and the handling of aircraft malfunctions must be learned in such a manner as to build the IUT's confidence in the aircraft. A satisfactory level of performance in all critical emergency procedures is required prior to designation as a flight instructor. Open book and closed book NATOPS examinations will be successfully completed prior to the NATOPS check flight.

11. Weather Minimums. OPNAVINST 3710.7Q weather minimums will be followed, as well as applicable SOPs and FTIs.

12. Flight/Simulator Interchangeability. Flight and simulator events may not be interchanged without approval by CNATRA.

l3. Definitions. The following terms found in the flight curriculum description will be applied to flight training as defined in this instruction:

a. Discuss

Instructor:	Quiz the IUT on the applicable procedures, systems, or maneuvers.
IUT:	Responsible for knowledge of the procedures prior to the event brief.

Item: Graded with an "X" by the instructor in the grade columns on the ITF, labeled "DI" in the "ID" column. If this is not available on the ITF, they should be graded in the most appropriate area (e.g., HW, PROC, or EP).

b. Brief

Instructor: Brief the IUT on the applicable procedures.

IUT: Responsible for knowledge of the procedures prior to the event brief.

Item: Not graded, but marked with “BRF” by the instructor in the grade columns on the ITF, labeled “B” in the “ID” column.

c. Demonstrate

Instructor: Perform the maneuver with precision and accompanying description.

IUT: Responsible for knowledge of the procedures prior to the event brief and observes the maneuver.

Item: Not graded, but marked with "DEMO" by the instructor in the grade columns on the ITF, labeled "D" in the "ID" column.

d. Introduce

Instructor: Coaches the IUT through the maneuver as necessary, and/or may demonstrate the maneuver.

IUT: Responsible for knowledge of the procedures prior to the event brief and perform the maneuver with coaching as necessary.

Item: Graded with an "X" by the instructor in the grade columns on the ITF, labeled "I" in the "ID" column.

e. Practice

Instructor: Observe the IUT with minimal coaching; may also demonstrate the maneuver if necessary.

IUT: Must perform maneuver with minimal coaching.

Item: Graded with an "X" by the instructor in the grade columns on the ITF, labeled "P" in the "ID" column.

f. Review

Instructor: Observe and grade the maneuver without coaching; airborne critique is encouraged.

IUT: Expected to perform the maneuver without coaching and devoid of procedural errors. The level of performance must warrant progression to the next stage or phase of training.

Item: Graded with an "X" by the instructor in the grade columns on the ITF, labeled "R" in the "ID" column.

g. Non Graded

Instructor: Observe maneuver; item will be graded only if performed above average, below average, or unsatisfactory.

IUT: Expected to perform the maneuver without coaching and devoid of procedural errors. The level of performance must warrant progression to the next stage or phase of training.

Item: Not graded, but marked with **"NG"** by the instructor in the grade columns on the ITF, labeled "NG" in the "ID" column, if the student's performance is **average**. Graded with an **"X"** in the appropriate grade column if the student's performance for that maneuver was **other than average**.

h. Did Not Do

Instructor: A required item on the ITF, which was not done or completed for various reasons (i.e., weather, aircraft malfunctions, etcetera).

IUT: Maintain and present a copy of the ITF to the instructor of the next like event so the next instructor is clear about all Previously Graded Item(s) (PGI)/DND item(s).

Item: Not graded, but marked with "DND" by the instructor in the grade columns on the ITF. If the event is incomplete, an associated remark is required. One incomplete item constitutes an incomplete event. Every item previously marked "DND" shall be either graded appropriately, or marked "DND" if incomplete again.

i. Not Applicable — Not graded, but marked with "NA" by the instructor in the grade columns on the ITF. This is used **ONLY** for items in the following two different cases:
(1) **LABELED** on the ITF "Optional" or its equivalent.
(2) On authorized compressed/waived **set** of flights/events compressed into **one** flight/event (e.g., IUT Curriculum, Standard Primary Waivers, etcetera). In both of these two cases, the event shall be considered **COMPLETE**. If not within these two categories, it is considered incomplete; refer to and use "DND" instead.

j. Previously Graded Item

Instructor: A maneuver previously graded on an incomplete event. The item may be flown on the next attempt at that event if fuel/time permits or if required in order to accomplish the previously "DND" item(s) (e.g., Ground Procedures, Taxi, Takeoff, etcetera). If the IUT's performance is anything other than average on any previously graded item, it **shall be graded again**.

IUT: If required, performs the maneuver again, expected to do so at the level shown in the "ID" column.

Item: Not graded, but marked with **"PGI"** by the instructor on the ITF in the appropriate grade column if the IUT's performance for that item was **average** or if it was not performed again.
Graded with an **"X"** by the instructor on the ITF in the appropriate grade column if the student's performance for that item was **other than average**.

k.	Not Observed	Normally used for student solo events. Instructor (ODO/FDO/RDO) shall brief the student thoroughly to ensure preparedness. The student is expected to perform the maneuver as briefed to the skill level stipulated in the review description above. Not graded, but marked with **"NOB"** by the ODO/FDO/RDO on the ITF. Graded with an **"X"** in the appropriate grade column as observed by a qualified instructor (i.e., ODO/FDO, RDO, SODO, Section/ Division Leader, etcetera), if the student's performance for that maneuver was **other than average.**
l.	S-Coded flights	Student instructional flights designated by the "S" (e.g., BI-1S) are flown in the flight simulator.

14. IUT Performance Measurement. The minimum passing score for all examinations other than NATOPS is 80 percent correct. The following grading criteria for IUT flight and simulator events shall be used:

a. Above Average (AA). Performs maneuver/item with only very minor deviations and corrects immediately. Complete knowledge of procedures; demonstrates thorough knowledge of material.

b. Average (A). Performs maneuver/item within performance standards delineated in the appropriate Summary of Specific Enabling Objectives section of this instruction. Makes proper corrections to errors. Good knowledge of material and any deficiencies are very minor in non-critical areas.

c. Below Average (BA). Deviations may occasionally exceed limits of the performance standards; slow to recognize errors and make corrections. Knowledge of material is not quite complete in non-critical areas.

d. Unsatisfactory (U). Frequently exceeds limits of performance standards, without recognizing or correcting. Cannot perform the maneuver/item. Does not know procedures.

An IUT who receives a grade of unsatisfactory on a flight or simulator event or examination shall receive additional instruction as deemed appropriate by the TRAWING SIX Instructor Training Unit (ITU) Officer in Charge. If the IUT subsequently fails to qualify due to unsatisfactory performance, he shall be referred to the TRAWING commander for appropriate action.

15. Flight Support Events. Flight support events will be scheduled according to the Outline of Instruction sequencing and, at the least, must be completed prior to the simulator or flight event the lecture supports.

16. Drop on Request (DOR) Policy. All Naval Air Training Command (NATRACOM) courses are voluntary. Accordingly IUTs have the option to individually request termination of training. Any time the IUT makes a statement such as "I quit" or "DOR," he or she shall be removed from the training environment and referred to the Instructor Training Unit Officer in Charge for administrative action.

17. Training Time Out. Any time a student or instructor has apprehension concerning his or her personal safety or that of another, he or she shall signal for a "Training Time Out" to clarify the situation and receive or provide additional instruction as appropriate. "Training Time Out" signals other than verbal shall be appropriate to the training environment and shall be clearly briefed.

SECTION I - TRAINING SUMMARY

1. Training Hour Summary

a. Module 0

FLIGHT TRAINING

STAGE	SYMBOL	TOTAL FLIGHTS	HRS PER FLIGHT	TOTAL HOURS
NATOPS	FAM	2	2.5	5.0
NATOPS CHECK	FAM-X	1	2.5	2.5
TOTALS		3		7.5

ADMINISTRATIVE AND CHECK IN

EVENTS	SYMBOL	HOURS
Physiology	PHY	6.0
Refresher Swim	R-3	6.0
NATOPS And Safety	NS	24.0
T-39 Flight Prep	PREP	18.0
NATOPS Examination	NTPS	6.0
Flight Instructor Training Course	FITC	30.0
Instrument Ground School	IGS	9.0
Administration	ADM	4.0
Progress Review Board	PRB	1.0
TOTALS		104.0

b. Module 1 - Strike Core

STRIKE CORE FLIGHT TRAINING

STAGE	SYMBOL	TOTAL FLIGHTS	HRS PER FLIGHT	TOTAL HOURS
Low Level Navigation	LL	4	2.0	8.0
Radar Navigation	RDR	4	2.2	8.8
Airways Navigation	AN	2	2.3	4.6
Strike	STK	2	2.4	4.8
TOTALS		12		26.2

STRIKE CORE SIMULATOR TRAINING

STAGE	SYMBOL	TOTAL EVENTS	HRS PER EVENT	TOTAL HOURS
Ground Mapping Radar Simulator	RST	2	2.0	4.0
TOTALS		2		4.0

STRIKE CORE FLIGHT SUPPORT TRAINING

STAGE	SYMBOL	HOURS
Low-Level and Radar Planning	LL/RP	7.0
Low-Level and Radar Navigation	LL/RN	7.0
Turnpoint Procedures	TPP	7.0
Radar Systems	RS	16.0
Aircraft Carrier Procedures	CVP	4.0
Strike Seminar	SS	5.0
Strike Phase Review	SPX	2.0
Standardization Exams	FINAL	2.0
TOTALS		50.0

c. Module 2 - Strike/Fighter

STRIKE/FIGHTER FLIGHT TRAINING

STAGE	SYMBOL	TOTAL FLIGHTS	HRS PER FLIGHT	TOTAL HOURS
Radar Intercept Training	STK/FTR	6	2.6	15.6
Airways Navigation	AN	2	2.5	5.0
TOTALS		8		20.6

STRIKE/FIGHTER SIMULATOR TRAINING

STAGE	SYMBOL	TOTAL EVENTS	HRS PER EVENT	TOTAL HOURS
Synthetic Radar Training	ST	13	1.5	19.5
TOTALS		13		19.5

STRIKE/FIGHTER FLIGHT SUPPORT TRAINING

STAGE	SYMBOL	HOURS
Intercept Procedures	IP	43.5
Airborne Intercept Radar	AIR	2.5
Fighter Mission	FE	6.0
End of Basic Review	EBIX	2.0
Mid Phase Review	MPIX	4.0
Standardization Examination	FINAL	2.0
TOTALS		60.0

d. Module 3 - Strike Composite

STRIKE COMPOSITE FLIGHT TRAINING

STAGE	SYMBOL	TOTAL FLIGHTS	HRS PER FLIGHT	TOTAL HOURS
Composite Strike	COMP	2	2.3	4.6
TOTALS		2		4.6

STRIKE COMPOSITE SIMULATOR TRAINING

STAGE	SYMBOL	TOTAL EVENTS	HRS PER EVENT	TOTAL HOURS
Composite Strike Simulator	CST	2	2.0	4.0
TOTALS		2		4.0

STRIKE COMPOSITE FLIGHT SUPPORT TRAINING

STAGE	SYMBOL	HOURS
Radar Terrain Interpretation	RS	3.0
Composite Strike Planning	CSP	3.0
Standardization Exam	FINAL	1.0
TOTALS		7.0

2. Training Allocation By Module

a. Strike Instructor

MOD	FLIGHT HOURS/EVENTS	SIMULATOR HOURS/EVENTS	FLT SPT HOURS	Tc DAYS	Tt DAYS
0	7.5/ 3	- / -	104.0	20.48	24.58
1	26.2/12	4.0/ 2	50.0	21.63	25.96
3	4.6/ 2	4.0/ 2	7.0	4.53	5.44
TOTALS	38.3/17	8.0/ 4	161.0	46.98	55.98

b. Strike/Fighter Instructor

MOD	FLIGHT HOURS/EVENTS	SIMULATOR HOURS/EVENTS	FLT SPT HOURS	Tc DAYS	Tt DAYS
0	7.5/ 3	- / -	104.0	20.48	24.58
2	20.6/ 8	19.5/13	60.0	26.08	31.30
TOTALS	28.1/11	19.5/13	164.0	46.56	55.88

3. Training Time Analysis. The following table shows the additional training contact time involved for each programmed curriculum hour, flight or simulator event. The figures represent the minimum average time an IUT is involved in the direct learning process, either in preparation for, or using training equipment.

ADDITIONAL TRAINING TIME PER PROGRAM CURRICULUM EVENT (e)

Training Area	Preparation and Study	Brief and Debrief	Preflight and Taxi	Total (k)
Flight	1.0	2.3	0.5	3.8*
Simulator	0.5	1.5		2.0*

*Training Time per event

a. Administrative Time, transit time from activity to activity, meals, scheduling delays, and military watchstanding duties are not considered. The IUT training week is based on 6 hours of training per day, 5 days a week (30 hours). Computation of IUT training is based on the following formula:

ch = Curriculum hours
e = Events
k = Additional training time per curriculum event
Tc = Curriculum time

$$\frac{ch + (e \times k)}{6 \text{ (days) or } 30 \text{ (weeks)}} = Tc \text{ (days or weeks)}$$

The Tc calculated is the total contact time required to complete this phase of training.

b. Time to Train (Tt). The following factors are considered in computing Time to Train: weather, unsatisfactory events and associated delays, medical groundings and flights or simulator events cancelled due to lack of instructor or equipment availability. The combination of these factors constitutes additional time required to train.

c. Strike Instructor Training Time

Training Area		Training Days	Weeks
Flight:	38.3 hours 17 events	17.15	3.43
Simulator	8.0 hours 4 events	2.67	0.53
Flight Support	161.0 hours	26.83	5.37
Subtotal:		46.65	9.33
Administrative:	0.0	0.00	0.00
Curriculum Time (Tc):		46.65	9.33

d. Strike Instructor Time to Train

Curriculum Time (Tc)	46.65	9.33
At (20%)	9.33	1.87
Time to Train (Tt)	55.98	11.20

e. Strike/Fighter Instructor Training Time

Training Area		Training Days	Weeks
Flight:	28.1 hours 11 events	11.65	2.33
Simulator	19.5 hours 13 events	7.58	1.52
Flight Support	164.0 hours	27.33	5.46
Subtotal:		46.56	9.31
Administrative:	0.0	0.00	0.00
Curriculum Time (Tc):		46.56	9.31

f. Strike/Fighter Instructor Time to Train

Curriculum Time (Tc)	46.56	9.31
At (20%)	9.32	1.86
Time to Train (Tt)	55.88	11.17

4. Module Summary

MODULE	FLIGHT	ACADEMIC FLIGHT SUPPORT	SIMULATOR
0	FAM A-B, FAM-X	PHY, R-3, NS 1-6, PREP, FITC, IGS, ADM, PRB-1	
1	LL 1-4X, RDR 1-4X, AN 1-2X, STK 1-2	LL/RP, LL/RN, TPP, RS 1-3, CVP, SS, SPX, FINAL	RST 1-2
2	STK/FTR 1-6X, AN 1-2	IP 1-23, AIR 1-2, FE 1-3, EBIX, MPIX 1-2, FINAL	AIST 1-13X
3	COMP 1-2	RS 4, CSP, FINAL	CST 1-2

5. Outline Of Training

PERIOD REQUIREMENTS	SYMBOL	DESCRIPTION	DURATION
		MODULE 0	
MOD 0-1 Lecture & Devices	PHY	FLIGHT PHYSIOLOGY	6.0
MOD 0-2 Lecture & Swim Tank	R-3	REFRESHER SWIM	6.0
MOD 0-3 Lecture	NS-1	T-39 ENGINE, FUEL AND ELECTRICAL SYSTEMS	6.0
MOD 0-4 Lecture	NS-2	T-39 HYDRAULIC, FLIGHT CONTROL AND ANTI-ICE SYSTEMS	6.0
MOD 0-5 Lecture	NS-3	T-39 ENVIRONMENTAL EQUIPMENT, AVIONICS AND ELECTRONIC HSI	6.0
MOD 0-6 Lecture	NS-4	T-39 EMERGENCY PROCEDURES, SYSTEMS REVIEW AND PRE-FLIGHT PROCEDURES	6.0
MOD 0-7 Lecture	PREP-1	T-39 FLIGHT PREPARATION I	6.0
MOD 0-8 Lecture	PREP-2	T-39 FLIGHT PREPARATION II	6.0
MOD 0-9 Lecture	PREP-3	T-39 FLIGHT PREPARATION III	6.0
MOD 0-10 Lecture	FITC	FLIGHT INSTRUCTOR TRAINING COURSE	30.0
MOD 0-11 Lecture	IGS	INSTRUMENT GROUND SCHOOL	9.0
MOD 0-12 Admin	ADM	ADMINISTRATION	4.0
MOD 0-13 Admin	PRB-1	PROGRESS REVIEW BOARD	1.0

PERIOD REQUIREMENTS	SYMBOL	DESCRIPTION	DURATION
MOD 0-14	FAM-A	NATOPS FAMILIARIZATION FLIGHT 1	2.5

T-39N

Introduce:

a. Emergency procedures
b. Walkaround inspection
c. Start limitations
d. Ground procedures
e. Pressurization system
f. Electrical (Dc) system
g. Electrical (Ac) system
h. Hydraulic system
i. Stalls/unusual attitudes
j. Avionics
k. Fuel system
l. Anti-ice systems
m. Course rules/INAV
n. Limitations

MOD 0-15	FAM-B	NATOPS FAMILIARIZATION FLIGHT 2	2.5

T-39N

Practice:

a. Emergency procedures
b. Walkaround inspection
c. Start limitations
d. Ground procedures
e. Pressurization system
f. Electrical (DC) system
g. Electrical (AC) system
h. Hydraulic system
i. Stalls/unusual attitudes
j. Avionics
k. Fuel system
l. Anti-ice systems
m. Course rules/INAV
n. Limitations

MOD 0-16	NS-5	OPEN BOOK EXAMINATION	3.0

Exam

PERIOD REQUIREMENTS	SYMBOL	DESCRIPTION	DURATION
MOD 0-17 Exam	NS-6	CLOSED BOOK EXAMINATION	3.0
MOD 0-18 T-39N	FAM-X	NATOPS CHECK FLIGHT	2.5

Review:

a. Emergency procedures
b. Walkaround inspection
c. Start limitations
d. Ground procedures
e. Pressurization system
f. Electrical (DC) system
g. Electrical (AC) system
h. Hydraulic system
i. Stalls/unusual attitudes
j. Avionics
k. Fuel system
l. Anti-ice systems
m. Course rules/INAV
n. Limitations

MODULE 1

MOD 1-1 Lecture	LL/RP	LOW LEVEL AND RADAR PLANNING	7.0
MOD 1-2 Lecture	RS-1	RADAR PRINCIPLES AND SCOPE INTERPRETATION	7.0
MOD 1-3 Lecture	LL/RN	LOW LEVEL AND RADAR NAVIGATION	7.0
MOD 1-4 Lecture	RS-2	APG-66NT A/G RADAR OPERATIONS AND GMRT FAMILIARIZATION	4.0
MOD 1-5 Lecture	TPP	TURNPOINT PROCEDURES	7.0
MOD 1-6 Lecture	RS-3	RADAR PREDICTIONS	5.0
MOD 1-7 Lecture	CVP	AIRCRAFT CARRIER PROCEDURES	4.0
MOD 1-8 Lecture	SS	STRIKE SEMINAR	5.0
MOD 1-9 Lecture	SPX	STRIKE PHASE REVIEW	2.0

PERIOD REQUIREMENTS	SYMBOL	DESCRIPTION	DURATION
MOD 1-10 GMRT	RST-1	GMRT DEMONSTRATION	2.0

Introduce:

a. Chart, jet log and radar predictions review
b. Trainer briefing
c. Instructional assistance
d. Recognition of OUI errors
e. Debrief
f. Grading
g. Patience
h. ATJ review

Practice:

a. Radar procedures knowledge
b. GMRT knowledge

MOD 1-11 GMRT	RST-2	GMRT INTRODUCTION	2.0

Introduce:

a. Chart, jet log and radar predictions review
b. Trainer briefing
c. Instructional assistance
d. Recognition of OUI errors
e. Debrief
f. Grading
g. Patience
h. ATJ review

Practice:

a. Radar procedures knowledge
b. GMRT knowledge

PERIOD REQUIREMENTS	SYMBOL	DESCRIPTION	DURATION
MOD 1-12 T-39N	RDR-1	RADAR NAVIGATION FAMILIARIZATION FLIGHT	2.2

Introduce:

a. Radar navigation
b. Situational awareness

Practice:

a. Radar procedures knowledge
b. Debrief

MOD 1-13 T-39N	RDR-2	RADAR NAVIGATION FLIGHT I	2.2

Practice:

a. Chart, jet log and radar prediction review
b. Flight briefing
c. Radar procedures knowledge
d. Situational awareness
e. Recognition of OUI errors
f. Instructional assistance
g. Patience
h. ATJ review
i. Debrief
j. Grading

MOD 1-14 T-39N	RDR-3	RADAR NAVIGATION FLIGHT II	2.2

Practice:

a. Chart, jet log and radar predictions review
b. Flight briefing
c. Radar procedures knowledge
d. Situational awareness
e. Recognition of OUI errors
f. Instructional assistance
g. Patience
h. ATJ review
i. Debrief
j. Grading

PERIOD REQUIREMENTS	SYMBOL	DESCRIPTION	DURATION
MOD 1-15 T-39N	RDR-4X	RADAR NAVIGATION FLIGHT III AND STANDARDIZATION CHECK FLIGHT	2.2

Review:

a. Chart, jet log, and radar predictions review
b. Flight briefing
c. Radar procedures knowledge
d. Situational awareness
e. Recognition of OUI errors
f. Instructional assistance
g. Patience
h. ATJ review
i. Debrief
j. Grading

MOD 1-16 T-39N	LL-1	LOW LEVEL NAVIGATION FAMILIARIZATION FLIGHT	2.0

Introduce:

a. Low level procedures knowledge
b. Low level navigation

Practice:

a. Situational awareness
b. Debrief

MOD 1-17 T-39N	LL-2	LOW LEVEL FLIGHT I	2.0

Practice:

a. Chart and jet log review
b. Flight briefing
c. Low level procedures knowledge
d. Situational awareness
e. Recognition of OUI errors
f. Instructional assistance
g. Patience
h. ATJ review
i. Debrief
j. Grading

PERIOD REQUIREMENTS	SYMBOL	DESCRIPTION	DURATION
MOD 1-18 T-39N	LL-3	LOW LEVEL FLIGHT II	2.0

Practice:

a. Chart and jet log review
b. Flight briefing
c. Low level procedures knowledge
d. Situational awareness
e. Recognition of OUI errors
f. Instructional assistance
g. Patience
h. ATJ review
i. Debrief
j. Grading

MOD 1-19 T-39N	LL-4X	LOW LEVEL FLIGHT III AND STANDARDIZATION CHECK FLIGHT	2.0

Review:

a. Chart and jet log review
b. Flight briefing
c. Low level procedures knowledge
d. Situational awareness
e. Recognition of OUI errors
f. Instructional assistance
g. Patience
h. ATJ review
i. Debrief
j. Grading

PERIOD REQUIREMENTS	SYMBOL	DESCRIPTION	DURATION
MOD 1-20 T-39N	AN-1	AIRWAYS NAVIGATION FLIGHT I	2.3

Introduce:

a. Jet log and DD-175 review
b. Flight briefing
c. Navigational procedures knowledge
d. NATOPS knowledge
e. Grading

Practice:

a. Recognition of OUI errors
b. Instructional assistance
c. Patience
d. ATJ review
e. Debrief

MOD 1-21 T-39N	AN-2X	AIRWAYS NAVIGATION FLIGHT II AND STANDARDIZATION CHECK FLIGHT	2.3

Review:

a. Jet log and DD-175 review
b. Flight briefing
c. Navigational procedures knowledge
d. NATOPS knowledge
e. Recognition of OUI errors
f. Instructional assistance
g. Patience
h. ATJ review
i. Debrief
j. Grading

PERIOD REQUIREMENTS	SYMBOL	DESCRIPTION	DURATION
MOD 1-22 T-39N	STK-1	STRIKE MISSION FLIGHT I	2.4

Demonstrate:

a. Chart, jet log, and radar prediction review
b. Flight briefing
c. Instructional assistance
d. ATJ review
e. Debrief
f. Grading

Practice:

a. Strike mission procedures knowledge
b. Situational awareness
c. Recognition of OUI errors

MOD 1-23 T-39N	STK-2	STRIKE MISSION FLIGHT II	2.4

Practice:

a. Chart, jet log, and radar prediction review
b. Flight briefing
c. Strike mission procedures knowledge
d. Situational awareness
e. Recognition of OUI errors
f. Instructional assistance
g. Patience
h. ATJ review
i. Debrief
j. Grading

MOD 1-24 EXAM	FINAL	CURRICULUM STANDARDIZATION EXAMINATIONS (RDR, LL, AN)	2.0

PERIOD REQUIREMENTS	SYMBOL	DESCRIPTION	DURATION
		MODULE 2	
MOD 2-1 Lecture	IP-1	AIR-TO-AIR INTERCEPTS	1.0
MOD 2-2 Lecture	IP-2	AIR INTERCEPT CONTROL	1.0
MOD 2-3 Lecture	AIR-1	INTRODUCTION TO AIR-TO-AIR RADAR	1.0
MOD 2-4 Lecture	AIR-2	APG-66NT PULSE MODES	1.5
MOD 2-5 Lecture	IP-3	DESCRIPTIVE AND DIRECTIVE COMMENTARY	1.5
MOD 2-6 Lecture	IP-4	INTERCEPT VISUALIZATION	2.0
MOD 2-7 Lecture	IP-5	INTERCEPT GEOMETRY I	1.5
MOD 2-8 Lecture	IP-6	INTERCEPT GEOMETRY II	1.5
MOD 2-9 Lecture	IP-7/8	TARGET ASPECT FORMULA AND COLLISION COURSE CORRECTIONS	5.0
MOD 2-10 Lecture	IP-9/10	DISPLACEMENT TURN FUNDAMENTALS	3.0
MOD 2-11 Lecture	IP-11	COUNTERTURN FUNDAMENTALS	3.0
MOD 2-12 Lecture	IP-12/ 13	INTERCEPT PROGRESSION I	2.0
MOD 2-13 Lecture	IP-14/ 15	INTERCEPT PROGRESSION II	2.0
MOD 2-14 Lecture	EBIX-1	END OF BASIC INTERCEPTS REVIEW	2.0
MOD 2-15 Lecture	IP-16/ 17	AIR-TO-AIR MISSILES	3.0
MOD 2-16 Lecture	IP-18	INTERCEPT VARIATIONS	3.0
MOD 2-17 Lecture	IP-19	LEAD COLLISION INTERCEPTS	3.0
MOD 2-18 Lecture	FE-1	AIR INTELLIGENCE	3.0

PERIOD REQUIREMENTS	SYMBOL	DESCRIPTION	DURATION
MOD 2-19 Lecture	FE-2	FIGHTER MISSIONS	1.5
MOD 2-20 Lecture	FE-3	TACTICAL DATA SYSTEMS	1.5
MOD 2-21 Exam	MPIX 1&2	CURRICULUM MID-PHASE EXAMINATION AND RIO STUDENT CURRICULUM REVIEW	4.0
MOD 2-22 Lecture	IP-20	CONVERSION PROCEDURES	2.0
MOD 2-23 Lecture	IP-21	FLEET CONVERSION PROCEDURES	2.0
MOD 2-24 Lecture	IP-22	UNKNOWN PROCEDURES	4.0
MOD 2-25 Lecture	IP-23	ADVANCED PROCEDURES	3.0
MOD 2-26 AIRT	AIST-1	AIRT INTRODUCTION	1.5

Introduce:

a. ATJ review
b. Briefing
c. System knowledge
d. Intercept procedures
e. Debrief

MOD 2-27 AIRT	AIST-2	ST INTRODUCTION TO PURSUIT INTERCEPTS	1.5

Practice:

a. ATJ review
b. Briefing
c. System knowledge
d. Intercept procedures
e. Detect and correct OUI errors
f. Patience
g. Coverage of check items
h. Grading
i. Debrief

PERIOD REQUIREMENTS	SYMBOL	DESCRIPTION	DURATION
MOD 2-28 AIRT	AIST-3	ST INTRODUCTION TO ATTACK-REATTACKS	1.5

Practice:

a. ATJ review
b. Briefing
c. System knowledge
d. Intercept procedures
e. Detect and correct OUI errors
f. Patience
g. Coverage of check items
h. Grading
i. Debrief

MOD 2-29 AIRT	AIST-4	ST REVIEW OF PURSUIT/ATTACK-REATTACKS	1.5

Practice:

a. ATJ review
b. Briefing
c. System knowledge
d. Intercept procedures
e. Detect and correct OUI errors
f. Patience
g. Coverage of check items
h. Grading
i. Debrief

MOD 2-30 AIRT	AIST-5	ST INTRODUCTION TO CONVERSION INTERCEPTS	1.5

Practice:

a. ATJ review
b. Briefing
c. System knowledge
d. Intercept procedures
e. Detect and correct OUI errors
f. Patience
g. Coverage of check items
h. Grading
i. Debrief

PERIOD REQUIREMENTS	SYMBOL	DESCRIPTION	DURATION
MOD 2-31 AIRT	AIST-6	ST PRACTICE OF CONVERSION INTERCEPTS	1.5

Practice:

a. ATJ review
b. Briefing
c. System knowledge
d. Intercept procedures
e. Detect and correct OUI errors
f. Patience
g. Coverage of check items
h. Grading
i. Debrief

MOD 2-32 AIRT	AIST-7	ST REVIEW OF CONVERSION INTERCEPTS	1.5

Practice:

a. ATJ review
b. Briefing
c. System knowledge
d. Intercept procedures
e. Detect and correct OUI errors
f. Patience
g. Coverage of check items
h. Grading
i. Debrief

MOD 2-33 AIRT	AIST-8	ST INTRODUCTION TO UNKNOWN INTERCEPTS	1.5

Practice:

a. ATJ review
b. Briefing
c. System knowledge
d. Intercept procedures
e. Detect and correct OUI errors
f. Patience
g. Coverage of check items
h. Grading
i. Debrief

PERIOD REQUIREMENTS	SYMBOL	DESCRIPTION	DURATION
MOD 2-34 AIRT	AIST-9	ST REVIEW OF UNKNOWN INTERCEPTS	1.5

Practice

a. ATJ review
b. Briefing
c. System knowledge
d. Intercept procedures
e. Detect and correct OUI errors
f. patience
g. Coverage of check items
h. Grading
i. Debrief

MOD 2-35 AIRT	AIST-10	ST INTRODUCTION TO ADVANCED INTERCEPTS	1.5

Practice:

a. ATJ review
b. Briefing
c. System knowledge
d. Intercept procedures
e. Detect and correct OUI errors
f. Patience
g. Coverage of check items
h. Grading
i. Debrief

MOD 2-36 AIRT	AIST-11	ST PRACTICE OF ADVANCED INTERCEPTS	1.5

Practice:

a. ATJ review
b. Briefing
c. System knowledge
d. Intercept procedures
e. Detect and correct OUI errors
f. Patience
g. Coverage of check items
h. Grading
i. Debrief

EVENT REQUIREMENTS	SYMBOL	DESCRIPTION	DURATION
MOD 2-37 AIRT	AIST-12	ST REVIEW OF ADVANCED INTERCEPTS	1.5

Practice:

a. ATJ review
b. Briefing
c. System knowledge
d. Intercept procedures
e. Detect and correct OUI errors
f. Patience
g. Coverage of check items
h. Grading
i. Debrief

MOD 2-38 AIRS	AIST-13X	ST STANDARDIZATION CHECK	1.5

Review:

a. ATJ review
b. Briefing
c. System knowledge
d. Intercept procedures
e. Detect and correct OUI errors
f. Patience
g. Coverage of check items
h. Grading
i. Debrief

EVENT REQUIREMENTS	SYMBOL	DESCRIPTION	DURATION
MOD 2-39 T-39N	STK/ FTR-1	RADAR INTERCEPT FAMILIARIZATION	2.6

Introduce:

a. Flight briefing
b. Radar manipulation
c. Patience
d. Instructor assistance
e. Coverage of check items
f. Grading
g. Debrief
h. Detect and correct OUI errors
i. ATJ review

Practice:

a. Procedures knowledge
b. Aircraft knowledge
c. Course rules compliance
d. Nav situational analysis

MOD 2-40 T-39N	STK/ FTR-2	ATTACK-REATTACK INTERCEPTS	2.6

Practice:

a. Flight briefing
b. Procedures knowledge
c. Aircraft knowledge
d. Course rules compliance
e. Nav situational analysis
f. Radar manipulation
g. Patience
h. Instructor assistance
i. Coverage of check items
j. Grading
k. Debrief
l. Detect and correct OUI errors
m. ATJ review

EVENT REQUIREMENTS	SYMBOL	DESCRIPTION	DURATION
MOD 2-41 T-39N	STK/ FTR-3	CONVERSION INTERCEPTS	2.6

Practice:

a. Flight briefing
b. Procedures knowledge
c. Aircraft knowledge
d. Course rules compliance
e. Nav situational analysis
f. Radar manipulation
g. Patience
h. Instructor assistance
i. Coverage of check items
j. Grading
k. Debrief
l. Detect and correct OUI errors
m. ATJ review

MOD 2-42 T-39N	STK/ FTR-4	UNKNOWN INTERCEPTS	2.6

Practice:

a. Flight briefing
b. Procedures knowledge
c. Aircraft knowledge
d. Course rules compliance
e. Nav situational analysis
f. Radar manipulation
g. Patience
h. Instructor assistance
i. Coverage of check items
j. Grading
k. Debrief
l. Detect and correct OUI errors
m. ATJ review

EVENT REQUIREMENTS	SYMBOL	DESCRIPTION	DURATION
MOD 2-43 T-39N	STK/ FTR-5	ADVANCED INTERCEPTS	2.6

Practice:

a. Flight briefing
b. Procedures knowledge
c. Aircraft knowledge
d. Course rules compliance
e. Nav situational analysis
f. Radar manipulation
g. Patience
h. Instructor assistance
i. Coverage of check items
j. Grading
k. Debrief
l. Detect and correct OUI errors
m. ATJ review

MOD 2-44 T-39N	STK/ FTR-6X	STANDARDIZATION CHECK FLIGHT	2.6

Review:

a. Flight briefing
b. Procedures knowledge
c. Aircraft knowledge
d. Course rules compliance
e. Nav situational analysis
f. Radar manipulation
g. Patience
h. Instructor assistance
i. Coverage of check items
j. Grading
k. Debrief
l. Detect and correct OUI errors
m. ATJ review

EVENT REQUIREMENTS	SYMBOL	DESCRIPTION	DURATION
MOD 2-45 T-39N	AN-1	AIRWAYS NAVIGATION FLIGHT I	2.3

Introduce:

a. Jet card and DD-175 review
b. Flight briefing
c. Navigational procedures knowledge
d. NATOPS knowledge
e. Grading

Practice:

a. Recognition of OUI errors
b. Instructional assistance
c. Patience
d. ATJ review
e. Debrief

MOD 2-46 T-39N	AN-2X	AIRWAYS NAVIGATION FLIGHT II AND STANDARDIZATION CHECK FLIGHT	2.3

Review:

a. Jet card and DD-175 review
b. Flight briefing
c. Navigational procedures knowledge
d. NATOPS knowledge
e. Recognition of OUI errors
f. Instructional assistance
g. Patience
h. ATJ review
i. Debrief
j. Grading

MOD 2-47 Lecture/ Exam	FINAL	CURRICULUM STANDARDIZATION REVIEW AND EXAMINATION (FR and FX)	2.0

EVENT REQUIREMENTS	SYMBOL	DESCRIPTION	DURATION
		MODULE 3	
MOD 3-1 Lecture	RS	RADAR TERRAIN INTERPRETATION	3.0
MOD 3-2 LECTURE	CSP	COMPOSITE STRIKE PLANNING AND NAVIGATION PROCEDURES	3.0
MOD 3-3 GMRT	CST-1	COMPOSITE STRIKE SIMULATOR I	2.0

Practice:

a. Chart and jet log review
b. Prediction review
c. Trainer briefing
d. Terrain interpretation
e. MN procedures knowledge
f. Recognition of OUI errors
g. Instructional assistance
h. Patience
i. ATJ review
j. Debrief
k. Grading
l. WASEX

MOD 3-4 GMRT	CST-2	COMPOSITE STRIKE SIMULATOR II	2.0

Practice:

a. Chart and jet log review
b. Prediction review
c. Trainer briefing
d. Terrain interpretation
e. MN procedures knowledge
f. Recognition of OUI errors
g. Instructional assistance
h. Patience
i. ATJ review
j. Debrief
k. Grading
l. WASEX

EVENT REQUIREMENTS	SYMBOL	DESCRIPTION	DURATION
MOD 3-5 T-39N	COMP-1	COMPOSITE STRIKE FLIGHT I	2.3

Practice:

a. Chart and jet log review
b. Prediction review
c. Flight briefing
d. Radar procedures knowledge
e. Terrain interpretation
f. Situational awareness
g. Recognition of OUI errors
h. Instructional assistance
i. Patience
j. ATJ review
k. Debrief
l. Grading

MOD 3-6 T-39N	COMP-2	COMPOSITE STRIKE FLIGHT II	2.3

Practice:

a. Chart and jet log review
b. Prediction review
c. Flight briefing
d. Radar procedures knowledge
e. Terrain interpretation
f. Situational awareness
g. Recognition of OUI errors
h. Instructional assistance
i. Patience
j. ATJ review
k. Debrief
l. Grading

MOD 3-7 EXAM	FINAL EXAM	COMPOSITE STRIKE STANDARDIZATION	1.0

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SECTION II - APPENDIX A

TERMINAL OBJECTIVES

STRIKE INSTRUCTOR TERMINAL OBJECTIVES (TOs)

The Strike IUT Curriculum is designed to develop and prepare the prospective flight instructor for duty as a qualified Strike instructor. Particular emphasis is placed upon standardizing the instruction given to the students. Upon satisfactory completion of this curriculum, the new instructor will be able to perform the following objectives:

A. Be fully instrument and T-39N Naval Air Training and Operating Procedures Standardization (NATOPS) qualified.

B. Instruct student naval flight officer/navigators (SNFO/NAVs) in the proper procedures for the safe and efficient operation of squadron aircraft and evaluate student abilities to perform related tasks.

C. Instruct SNFO/NAVs in radar navigation using a ground mapping radar and evaluate student abilities to perform related tasks.

D. Instruct SNFO/NAVs in proper procedures in visual navigation and evaluate student abilities to perform related tasks.

E. Instruct SNFO/NAVs in proper procedures in airways navigation and evaluate student abilities to perform related tasks.

F. Instruct SNFO/NAVs in proper composite strike procedures and evaluate student abilities to perform related tasks.

STRIKE/FIGHTER INSTRUCTOR TERMINAL OBJECTIVES (TOs)

The Strike/Fighter IUT Curriculum is designed to develop and prepare the prospective flight instructor for duty as a qualified Strike/Fighter instructor. Particular emphasis is placed upon standardizing the instruction given to the students. Upon satisfactory completion of this curriculum, the new instructor will be able to perform the following objectives:

A. Be fully instrument and T-39N NATOPS qualified.

B. Instruct SNFO/NAVs in the proper procedures for the safe and efficient operation of squadron aircraft and evaluate student abilities to perform related tasks.

C. Instruct SNFO/NAVs in proper procedures in airways and terminal area navigation and evaluate student abilities to perform related tasks.

D. Instruct SNFO/NAVs in aircraft intercept techniques and procedures utilizing a radar weapons system and evaluate student abilities to perform related tasks.

ENABLING OBJECTIVES

STRIKE ENABLING OBJECTIVES

A. NATOPS, Flight Rules and Operating Procedures: Performance

OPERATIONS	CONDITIONS	STANDARDS
A-1 Qualify as a T-39N NATOPS qualified crewmember.	Given classroom and flight training.	In accordance with (IAW) OPNAVINST 3710.7Q and T-39N NATOPS.
A-2 Requalify as instrument qualified crewmember.	Given classroom training.	IAW OPNAVINST 3710.7Q.
A-3 Conduct training to encompass aircraft operating procedures and limitations and VMC/IMC flight rules and procedures.	Given SNFO/NAV flight and simulator training events and individual consultation given by Standardization instructor.	IAW FTI, NATOPS, FARs, FLIP, OPNAVINST 3710.7Q, NAS Pensacola Air Ops Manual, local Standard Operating Procedures (SOPs), and CNATRAINSTs 1542.121B, 1542.122B, and 1542.132.
A-3.1 Observe aircraft operating procedures and limitations and VMC/IMC flight rules and procedures flight support lectures.	Given classroom events conducted by a qualified instructor.	Same as A-3.

B. NATOPS, Flight Rules and Operations Procedures: Instruction

OPERATIONS	CONDITIONS	STANDARDS
B-1 Observe SNFO/NAV receiving aircraft operating procedures and limitations instruction.	Given flight and simulator training events conducted by a Standardization instructor.	IAW FTI, NATOPS, and CNATRAINSTs 1542.121B, 1542.122B, and 1542.132.
B-2 Practice instructing SNFO/NAV on aircraft operating procedures and limitations.	Given flight and simulator training events supervised by a Standardization instructor.	Same as B-1.
B-3 Observe SNFO/NAV receiving VMC/IMC flight rules and procedures instruction.	Given flight training events conducted by a Standardization instructor.	IAW FTI, FARs, FLIP, OPNAVINST 3710.7Q, NAS Pensacola Air Ops Manual, local SOPs, and CNATRAINSTs 1542.121B/122B and 1542.132.
B-4 Practice instructing SNFO/NAV on VMC/IMC flight rules and procedures.	Given flight events supervised by a Standardization instructor.	Same as B-3.
B-5 Evaluate SNFO/ NAV's application of NATOPS, VMC/IMC FARs, OPNAVINST 3710.7Q and SOPs.	Given flight training events and individual consultation by Standardization instructor.	IAW FTI, FARs, FLIP, OPNAVINST 3710.7Q, NAS Pensacola Air Ops Manual, local SOPs, and CNATRAINSTs 1542.121B, 1542.122B, and 1542.132.
B-5.1 Observe evaluation of SNFO/ NAV's application of NATOPS, VMC/IMC FARs, OPNAVINST 3710.7Q, and SOPs.	Given flight training events conducted by a Standardization instructor.	Same as B-5.
B-5.2 Practice evaluating SNFO/NAV's application of NATOPS, VMC/IMC FARs, OPNAVINST 3710.7Q, and SOP.	Given flight training events supervised by a Standardization instructor.	Same as B-5.

C. Radar Navigation

OPERATIONS	CONDITIONS	STANDARDS
C-1 Observe academic flight support lectures to refresh skills and learn teaching techniques.	Given classroom event conducted by qualified instructor.	IAW FTI and CNATRAINST 1542.132.
C-2 Conduct GMRT training to encompass radar operation and radar navigation procedures and techniques.	Given SNFO/NAV simulator training events and individual consultation by Standardization instructor.	IAW FTI and CNATRAINST 1542.132.
C-2.1 Observe a GMRT training event.	Given a SNFO/NAV training event conducted by a Standardization instructor.	Same as C-2.
C-2.2 Practice instructing GMRT training events.	Given SNFO/NAV training events supervised by a Standardization instructor.	Same as C-2.
C-3 Conduct SNFO/NAV airborne ground mapping radar training to encompass radar operation and radar navigation procedures and techniques.	Given airborne radar training events and individual consultation by a Standardization instructor.	IAW FTI and CNATRAINST 1542.132.
C-3.1 Observe airborne ground mapping radar training events.	Given SNFO/NAV training events conducted by a Standardization instructor.	Same as C-3.

OPERATIONS	CONDITIONS	STANDARDS
C-3.2 Practice instructing airborne ground mapping radar training events.	Given SNFO/NAV training events supervised by a Standardization instructor.	Same as C-3.
C-4 Evaluate SNFO/NAV’s ground mapping radar operation and navigation procedures and techniques.	Given airborne simulator training events and individual consultation by a Standardization instructor.	IAW FTI and CNATRAINST 1542.132.
C-4.1 Observe evaluation of SNFO/NAV's ground mapping operation and navigation procedures and techniques.	Given airborne or simulator ground mapping radar training events conducted by a Standardization instructor.	Same as C-4.
C-4.2 Practice evaluating SNFO/NAV's ground mapping radar operation and navigation procedures and techniques.	Given airborne or simulator ground mapping radar training events supervised by a Standardization instructor.	Same as C-4.

D. Visual Navigation

OPERATIONS	CONDITIONS	STANDARDS
D-1 Observe academic flight support lectures to refresh skills and learn teaching techniques.	Given classroom event conducted by qualified instructor.	IAW FTI and CNATRAINST 1542.132.
D-2 Conduct SNFO/NAV visual navigation training.	Given flight training events and individual consultation by a Standardization instructor.	IAW FTI and CNATRAINST 1542.132.
D-2.1 Observe visual navigation flight training events.	Given SNFO/NAV flight training events conducted by a Standardization instructor.	Same as D-2.
D-2.2 Practice instructing visual navigation procedures.	Given SNFO/NAV flight training events supervised by a Standardization instructor.	Same as D-2.
D-3 Evaluate SNFO/NAV visual navigation procedures.	Given flight training events and individual consultation by a Standardization instructor.	IAW FTI and CNATRAINST 1542.132.
D-3.1 Observe evaluation of SNFO/NAV's visual navigation procedures.	Given flight training events conducted by a Standardization instructor.	Same as D-3.
D-3.2 Practice evaluating SNFO/NAV's visual navigation procedures.	Given flight training events supervised by a Standardization instructor.	Same as D-3.

E. Airways Navigation

OPERATIONS	CONDITIONS	STANDARDS
E-1 Observe academic flight support lectures to refresh skills and learn teaching techniques.	Given classroom event conducted by qualified instructor.	IAW FTI and CNATRAINST 1542.132.
E-2 Conduct airways navigation and related tasks training.	Given SNFO/NAV flight training events and individual consultation by Standardization instructor.	IAW FTI and CNATRAINST 1542.132.
E-2.1 Observe airways navigation and related tasks training events.	Given SNFO/NAV flight training events conducted by a Standardization instructor.	Same as E-2.
E-2.2 Practice conducting airways navigation and related tasks training.	Given SNFO/NAV flight training events supervised by a Standardization instructor.	Same as E-2.
E-3 Evaluate SNFO/NAV's airways navigation and related tasks procedures and techniques.	Given flight training events and individual consultation by a Standardization instructor.	IAW FTI and CNATRAINST 1542.132.
E-3.1 Observe evaluation of SNFO/NAV's airways navigation and related tasks procedures and techniques.	Given flight training events conducted by a Standardization instructor.	Same as E-3.
E-3.2 Practice evaluating SNFO/NAV's airways navigation and related tasks procedures and techniques.	Given flight training events supervised by a Standardization instructor.	Same as E-3.

F. Composite Strike

OPERATIONS	CONDITIONS	STANDARDS
F-1 Observe academic flight support lectures to refresh skills and learn teaching techniques.	Given classroom events conducted by a qualified instructor.	IAW FTI and CNATRAINST 1542.122B.
F-2 Conduct SNFO/NAV Composite Strike training.	Given simulator and flight training events and individual consultation by a Standardization instructor.	IAW FTI and CNATRAINST 1542.122B.
F-2.1 Observe Composite Strike training events.	Given SNFO/NAV simulator and flight training events conducted by a Standardization instructor.	Same as F-2.
F-2.2 Practice instructing Composite Strike procedures.	Given SNFO/NAV simulator and flight training events supervised by a Standardization instructor.	Same as F-2.
F-3 Evaluate SNFO/NAV's Composite Strike procedures and techniques	Given simulator and flight training events and individual consultation by a Standardization instructor.	IAW FTI and CNATRAINST 1542.122B.
F-3.1 Observe evaluation of SNFO/NAV's Composite Strike procedures and techniques.	Given simulator and flight training events conducted by a Standardization instructor.	Same as F-3.
F-3.2 Practice evaluating SNFO/NAV's Composite Strike procedures and techniques.	Given simulator and flight training events supervised by a Standardization instructor.	Same as F-3.

STRIKE/FIGHTER ENABLING OBJECTIVES

A. NATOPS, Flight Rules and Operating Procedures: Performance

See Strike Enabling Objectives A-1 through A-3.1.

B. NATOPS, Flight Rules and Operating Procedures: Instruction

See Strike Enabling Objectives B-1 through B-5.2.

C. Airways Navigation

See Strike Enabling Objectives E-1 through E-3.2.

D. Intercepts

OPERATIONS	CONDITIONS	STANDARDS
D-1 Observe flight support lectures to refresh skills and learn teaching techniques.	Given classroom events conducted by a qualified instructor.	IAW FTI and CNATRAINST 1542.121B.
D-2 Conduct SNFO/NAV AIRT air-to-air radar operations and procedures training.	Given simulator training events and individual consultation by a Standardization instructor.	IAW FTI and CNATRAINST 1542.121B.
D-2.1 Observe AIRT air-to-air radar operations and intercept procedures training.	Given SNFO/NAV simulator training events conducted by a Standardization instructor.	Same as D-2.
D-2.2 Practice instructing AIRT air-to-air radar operation and intercept procedures.	Given SNFO/NAV simulator training events supervised by a Standardization instructor	Same as D-2.
D-3 Conduct airborne SNFO/NAV air-to-air radar operations and intercept procedures training.	Given flight training events and individual consultation by a Standardization instructor.	IAW FTI and CNATRAINST 1542.121B.
D-3.1 Observe airborne air-to-air radar operations and intercept procedures training.	Given SNFO/NAV flight training events conducted by a Standardization instructor.	Same as D-3.
D-3.2 Practice instructing airborne air-to-air radar operations and intercept procedures.	Given SNFO/NAV flight training events supervised by a Standardization instructor.	Same as D-3.

OPERATIONS	CONDITIONS	STANDARDS
D-4 Evaluate SNFO/NAV's air-to-air intercept procedures.	Given Ground Control Intercept (GCI) information, simulator and flight training events and individual consultation by a Standardization instructor.	IAW FTI and CNATRAINST 1542.121B
D-4.1 Observe evaluation of SNFO/NAV's air-to-air intercept procedures.	Given GCI information, simulator and flight training events conducted by a Standardization instructor.	Same as D-4.
D-4.2 Practice evaluating SNFO/NAV's air-to-air intercept procedures.	Given GCI information, simulator and flight training events supervised by a Standardization instructor.	Same as D-4.

MASTER MATERIALS LIST

1. Individually Issued Materials

TITLE	IDENTIFICATION	REV DATE	QTY PER IUT	COST EACH
a. CV Procedures	CNAT P-816	07-91	1	$0.66
b. Radar Planning and Navigation	CNAT P-819A	11-91	1	1.54
c. Radar Theory-Ground Mapping/ Intercept Fundamentals	CNAT P-820	12-94	1	2.14
d. Intercept Procedures	CNAT P-825	04-95	1	6.06
e. Turnpoint Procedures	CNAT P-XXX	XX-XX	1	1.50
f. T-39 Flight Prep Workbook	CNAT P-856	05-95	1	2.14
g. T-39 NATOPS Workbook	CNAT P-857	02-92	1	2.14
h. Instrument Ground Training	CNAT P-607	01-97	1	6.06
i. Master Curriculum Guide (STK/STK-FTR)	CNAT P-839	XX-XX	1	1.50
j. PDBA Officer Check-in/out	TRARON 86 1070/1		1	

Flight Clothing (Identification and quantity listed in CNATRAINST 10126.1B; cost listed in NAVSUP PUB 4100.)

2. Instructor Training Forms (ITFs)

a. ITF/Familiariza-tion, NATOPS FAM-A	CNATRA 1542/1439	4-97	1	0.03
b. ITF/Familiariza-tion, NATOPS FAM-B	CNATRA 1542/1440	4-97	1	0.03
c. ITF /Familiariza-tion, NATOPS FAM-X	CNATRA 1542/1453	4-97	1	0.03

TITLE	IDENTIFICATION	REV DATE	QTY PER IUT	COST EACH
d. ITF /Airways Navigation, AN-1	CNATRA 1542/1449	4-97	1	0.03
e. ITF/AN Stan Check, AN-2X	CNATRA 1542/1450	4-97	1	0.03
f. ITF/Low Level LL-1	CNATRA 1542/1446	4-97	1	0.03
g. ITF/Low Level LL-2, 3	CNATRA 1542/1447	4-97	2	0.03
h. ITF/Low Level STAN CHECK, LL-4X	CNATRA 1542/1448	4-97	1	0.03
i. ITF/Ground Map Radar Trainer, RST-1, 2	CNATRA 1542/1470	4-97	2	0.03
j. ITF/Radar Nav FAM, RDR-1	CNATRA 1542/1441	4-97	1	0.03
k. ITF/Radar Nav, RDR-2, 3	CNATRA 1542/1442	4-97	2	0.03
l. ITF/Radar Nav Stan Check, RDR-4X	CNATRA 1542/1445	4-97	1	0.03
m. ITF/Strike, STK-1	CNATRA 1542/1451	4-97	1	0.03
n. ITF/Strike, STK-2	CNATRA 1542/1452	4-97	1	0.03
o. ITF/Ground Map Radar Trainer, CST-1, 2	CNATRA 1542/1572	4-97	2	0.03
p. ITF/Composite Flight, COMP-1, 2	CNATRA 1542/1573	4-97	2	0.03
q. ITF/Synthetic Trainer, AIST-1	CNATRA 1542/1394	4-97	1	0.03
r. ITF/Synthetic Trainer, AIST-2-12	CNATRA 1542/1395	4-97	11	0.03
s. ITF/Synthetic Trainer, AIST-13X	CNATRA 1542/1418	4-97	1	0.03
t. ITF/STRIKE/ FIGHTER FAM STK/FTR-1	CNATRA 1542/1419	4-97	1	0.03
u. ITF/STK/FTR-2-5	CNATRA 1542/1420	4-97	4	0.03
v. ITF/STK/FTR-6X STAN CHECK	CNATRA 1542/1421	4-97	1	0.03

3. Support Materials

TITLE	IDENTIFICATION NUMBER	QUANTITY
a. T-39N NATOPS Flight Manual	SR-90-019	1
b. T39-N NATOPS Pocket Checklist	SR-90-020	1
c. Flight Crew Checklist	NSN 7510-00-766-4269	1
d. CV Procedures	CNAT P-816	1
e. Radar Planning and Navigation	CNAT P-819A	1
f. Radar Theory-Ground Mapping/ Intercept Fundamentals	CNAT P-820	1
g. Intercept Procedures	CNAT P-825	1
h. Turnpoint Procedures	CNAT P-XXX	1
i. T-39 Flight Prep Workbook	CNAT P-856	1
j. T-39 NATOPS Workbook	CNAT P-857	1
k. Instrument Ground Training	CNAT P-607	1
l. Master Curriculum Guide (STK/STK-FTR)	CNAT P-839	1

4. Aircraft and Major Training Devices

a. Aircraft T-39N

Quantity controlled by contract.

b. Ground Mapping Radar Trainer GMRT

Quantity and cost controlled by training services contract.

c. Air Intercept Radar Trainer AIRT

Quantity and cost controlled by training services contract.